Power pack

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1 General

The power pack is available in the following versions:

- Power pack with internal DC module (EvitaXL)
- Power pack with or without internal DC module (Evita 4 with optional “XL”)

In case of repair, select the respective power pack from the spare parts list. If the faulty power pack has an internal rechargeable battery, remove this battery and install it in the new power pack.

The power pack is no-load-proof and supplies the following output voltages:

- +24 V (22.32 V to 24.72 V)
- +15 V (14.55 V to 15.45 V)
- -15 V (-14.55 V to -15.45 V)
- +12 V (11.76 V to 12.24 V)
- +5 V (5.07 V to 5.23 V)

The voltages can be read out with the external DrägerService mode with personal computer.

The voltages +5 V and +24 V refer to digital ground.

The voltages +15 V, -15 V and +12 V refer to analog ground.

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The +5 V voltage is only stable under load. At no-load, the voltage is affected by interfering pulses. These interfering pulses may cause voltage peaks in the measured value display. Measure the +5 V voltage only under load!

2 Testing the fuse links

1 Measure the resistance of the fuse-links (Fig. 1/1) using a multimeter (Note: the fuse-links are located on the back of the power pack). If necessary, replace a faulty fuse-link with a fuse-link of the same type (Note: if the +24 V voltage is missing, the control unit might cause a short circuit).

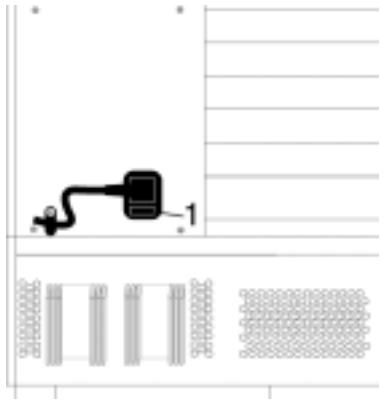

Fig. 1 Rear view (fuse-links)

Fuse-links

Mains voltage (100 V to 240 V)
F5 H / 250V IEC 127-2 / V (2 pcs)

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3 Testing the voltages in service mode

Test the voltages using the “external service mode with personal computer”.

4 Testing the power pack voltages

1 Switch off the device.

2 Unplug the power plug of the device from the socket-outlet.

3 Remove the tray from the device and put it aside.

4 Remove the plastic screws (Fig. 2/1) on the left-hand and right-hand sides of the device.

5 Remove the cover and put it aside.

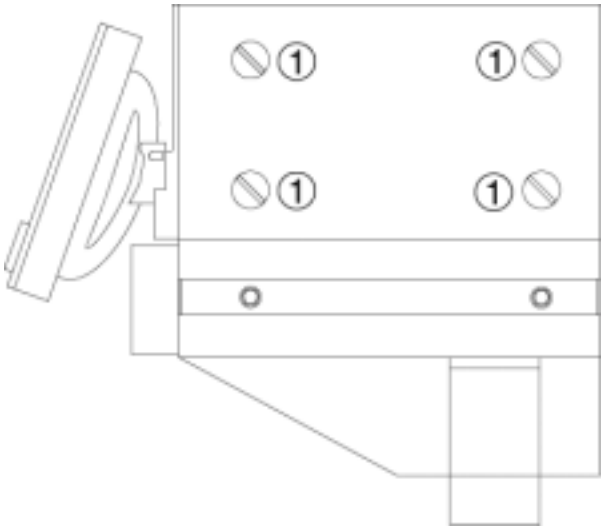

Fig. 2 Left- and right-hand view (removing the power pack)

6 Remove the screw and the cord grip (Fig. 3/1).

7 Remove the power supply cord (Fig. 3/2) from the mains socket of the power pack, and put the power supply cord aside.

Fig. 3 Rear view (removing the power supply unit)

8 Remove the screws (Fig. 4/1).

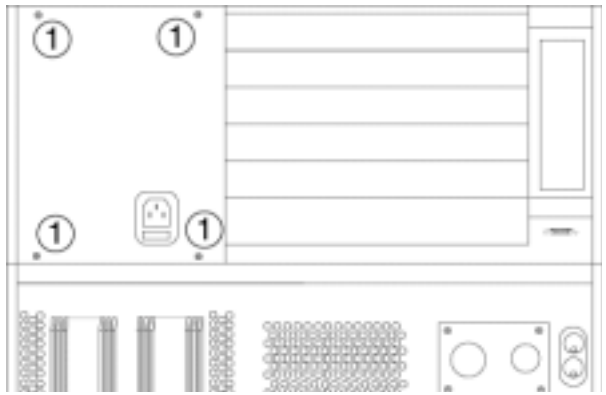

Fig. 4 Rear view (removing the power supply unit)

9 Remove the power pack from the device (at the rear).

Risk of short-circuit during measurement. The pins of the power pack are very close to each other which may cause a short-circuit in the power pack if pins are inadvertently bridged. Use only pointed test probes to measure the power pack voltages at the respective pins.

10 Connect the power supply cord to the removed power pack.

11 Connect the power pack to the mains power supply.

12 Measure at the following pins:

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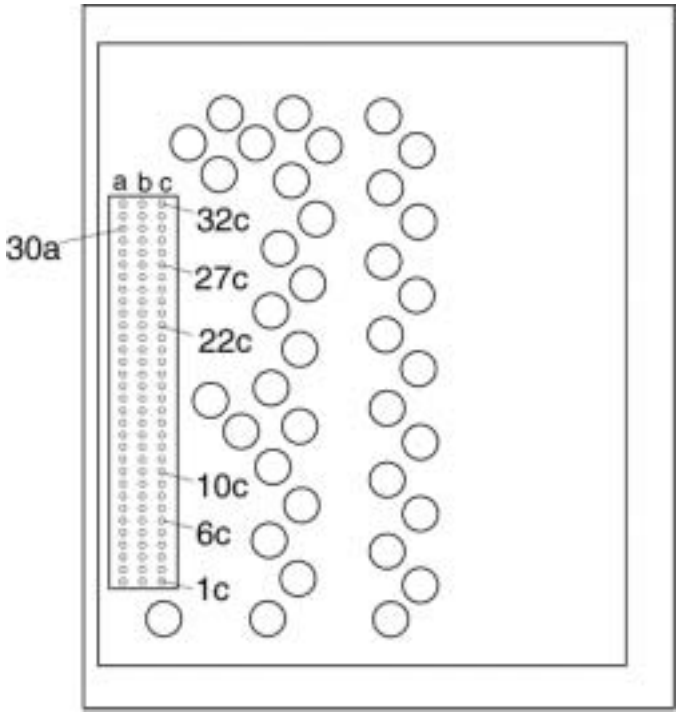

Fig. 5 Top view of the power pack (dismounted)

Pin	Assignment	Pin	Assignment
1 c	+24 V	27 c	+15 V
6 c	Internal battery	30 a	GND
10 c	+12 V	32 c	-15 V
22 c	+5 V		

5 Replacing the power pack

1 Switch off the device.

2 Unplug the power plug of the device from the socket-outlet.

3 Remove the tray from the device and put it aside.

4 Remove the plastic screws (Fig. 6/1) on the left-hand and right-hand sides of the device.

5 Remove the cover and put it aside.

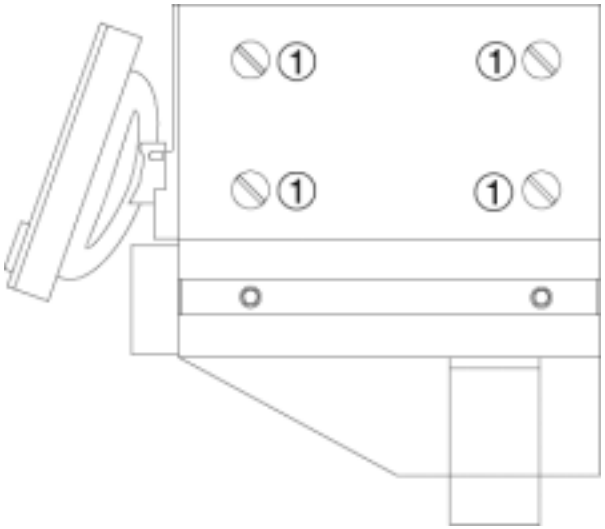

Fig. 6 Left- and right-hand view (removing the power pack)

6 Remove the screw and the cord grip (Fig. 7/1).

7 Remove the power supply cord (Fig. 7/2) from the mains socket of the power pack, and put the power supply cord aside.

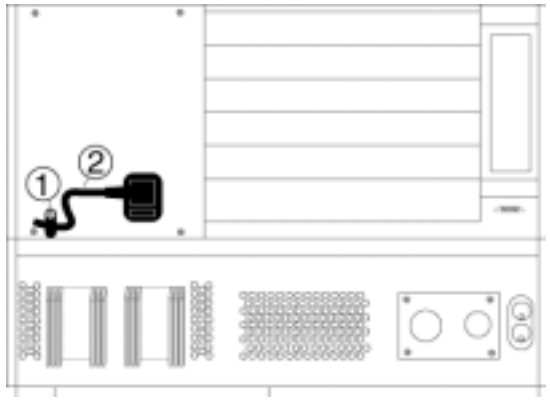

Fig. 7 Rear panel (power supply cord)

8 Remove the screws (Fig. 8/1).

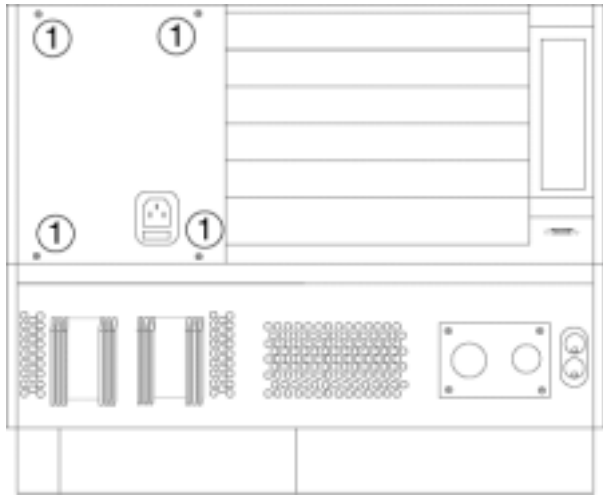

Fig. 8 Rear panel (power pack)

9 Remove the power pack from the device (at the rear).

10 Push the new power pack into the device.

11 Secure the new power pack to the device using the screws (Fig. 8/1).

12 Plug the power supply cord (Fig. 7/2) into the mains socket of the power pack.

13 Secure the cord grip to the power pack with the screw (Fig. 7/1).

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14 Secure the cover to the left-hand and right-hand sides of the device using the plastic screws (Fig. 9/1).

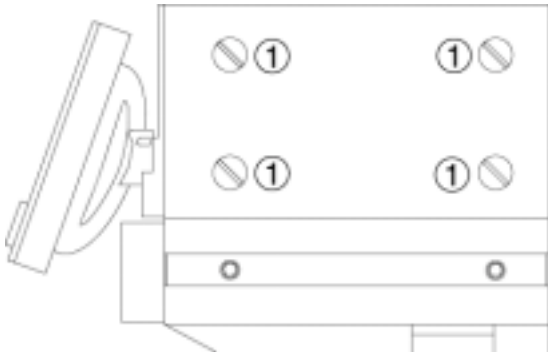

Fig. 9 Left- and right-hand side view of the device

15 Install the tray on the device.

16 Switch on the device and wait 10 minutes.

17 Perform “electrical safety tests” and “function tests” as described in the PMS procedure. For the USA and Canada: test according to CAN/CSA-22.2 No. 601.1-M90.

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